



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II  
26 FEDERAL PLAZA  
NEW YORK, NEW YORK 10278

12 JUL 1983

To All Interested Government Agencies and Public Groups:

In accordance with the procedures for the preparation of environmental impact statements, an environmental review has been performed on the proposed agency action below:

Project Name:	Southeast Amherst - Interceptor and Collector Sewer Project
Project Number:	C-36-1225-02
Purpose of Project:	The proposed project will eliminate groundwater pollution from inadequate on-site septic system discharges within the southeast corner of the Town of Amherst. Wastewaters from the service area will be treated at the Town's existing advanced wastewater treatment plant with ultimate discharge to Tonawanda Creek.
Project Originator:	Town of Amherst
Project Location:	Town of Amherst, Erie County, New York
Project Description:	This abatement project is for the construction of approximately 18,276 meters (59,960 feet) of 20 centimeter (8 inch) collection sewers and 9,489 meters (31,132 feet) of 25 to 46 centimeters (10 to 18 inch) interceptor sewers, 4 pump stations, 2,687 meters (8,815 feet) of force mains and about 350 manholes.
Proposed Eligible Project Cost:	\$7,963,540
EPA Grant (75 percent)	\$5,972,655

Our environmental review of this project indicates that no significant adverse environmental impacts will result from the proposed action. Consequently, we have made a preliminary decision not to prepare an environmental impact statement (EIS) on the project.

This decision is based on a careful review of the Facility plan and supporting documents by the New York State Department of Environmental Conservation (NYSDEC) and the recommendations of the NYSDEC regional office. All of these documents, along with the environmental assessment, are on file at the EPA and the NYSDEC regional offices, where they are available for public scrutiny upon request. A copy of the environmental assessment is enclosed for your review.

Environmental review and certification of plans and specifications for the Step 3 construction phase of the project will be carried out by NYSDEC. An oversight review will be carried out by EPA to ensure compliance with federal regulations.

Comments supporting or disagreeing with this decision may be submitted to the EPA for consideration. All comments must be received within thirty (30) calendar days of the date of this finding of no significant impact (FNSI). Please address your comments to the Chief, New York/Virgin Islands Section, Environmental Impacts Branch, Room 400. After evaluating any comments received on the project, EPA will make a final decision. However, no administrative action will be taken on the project for at least thirty (30) calendar days after the date of this FNSI.

Sincerely yours,

  
Jacqueline E. Schafer  
Regional Administrator

Enclosure

## ENVIRONMENTAL ASSESSMENT

### I. Project Identification:

Project Name: Southeast Amherst-Interceptor and Collector  
Sewer Project

Name and Address Of Applicant: Town of Amherst  
5583 Main Street  
Williamsville, New York 14221

EPA Project Number: C-36-1225-02  
Step 3 Grant Application

Project Location: Town of Amherst  
Erie County, New York

### II. Description of Facility Planning Area:

The planning area for this water pollution control project is within the Town of Amherst, Erie County, New York. Amherst is located adjacent to and northeast of the City of Buffalo, New York (see Figure 1). The Town of Amherst is primarily a residential community; its largest employer is the Amherst Campus of the State University of New York at Buffalo. Over the past decade it has been one of the fastest growing communities in the State. Its wastewater system has also expanded rapidly over the past decade and now includes approximately 618 kilometers (384 miles) of sanitary sewers and a 90,840 cubic meters (24 million gallons - MG) per day advanced secondary wastewater treatment plant.

The existing sewage treatment plant (STP) uses the pure oxygen activated sludge process for biological stabilization of wastes. Processed sludge is presently disposed of at the permitted Chaffee Landfill, although alternate uses and options are being investigated as part of a County Comprehensive Study (EPA project No. C-36-1288). The STP normally produces an effluent quality which meets discharge permit (SPDES) limitations. Independent of this project, however, the Town of Amherst is planning additional modifications of its system to improve performance during wet weather conditions. The environmental significance of these related projects is not considered herein but will be evaluated in separate assessments.

The specific planning area for the subject project includes primarily the southeast corner of the Town of Amherst, as shown on Figure 2. Southeast Amherst is the only large and heavily populated area within the Town which is not presently sewered. The Southeast Amherst Planning Area encompasses approximately 1,313 hectares (3,244 acres) which is about 9% of the total Town area. This area also contains roughly 650 residences and 1,725 people.

Between 1970 and 1980, the total Town population increased by about 18% to 102,689 people per census data. The population growth projection of the Statewide (208) Water Quality Management Plan for the Town is for a 6.5% increase (over 1980 data) to the year 2000 or for a total population of 115,800 at that time. Within the Southeast Amherst area, it is expected that the population growth rate could be twice the Town average. These growth projections have been reviewed and accepted by the Erie and Niagara Counties Regional Planning Board which is the local 208 planning agency.

Geology and soils were important considerations in planning wastewater disposal facilities for Southeast Amherst. The most prominent geological feature is the Onondaga Escarpment, which runs generally in an east-west direction, between Sheridan Drive and Main Street (NYS Rt. 5) in the planning area. The plain south of (above) the escarpment has shallow depth to bedrock, high groundwater and soils of dry loam or loam with stone fragments. To the north of the escarpment, the depth to bedrock varies between ten and twenty feet. The overlying soils are silty-sand and silty-clay sediments with low permeability and have a seasonally high water table. The Southeast Amherst Planning Area is generally quite flat, with slopes less than three percent. Due to the flat topograph, surface drainage is generally poor. Although, in some areas, drainage is enhanced by the proximity of jointed bedrock to the surface which allows rapid downward percolation of storm runoff. The combination of high groundwaters, poor drainage, and slowly permeable soils contributes to the development of wetland vegetation in numerous areas within the Town and three wetlands are located within the planning area.

There are no major streams or surface drainage ways within the Southeast Amherst Planning area. Although most of the planning area is within the watershed of Ellicott Creek to the west (refer to Figure 2), drainage from the most northern portion is to Tonawanda Creek which forms the north boundary of the Town of Amherst.

A Town Planning Board was established in 1949 and its first Master Plan was published in 1955. The present guidelines for development and zoning were adopted in 1975-76. Zoning has been based on a Land Use Plan which delineates zones of various residential density, commercial, industrial, recreational, and other uses. Within the Southeast Amherst area the predominant zoned uses are residential, community facilities (park, golf course, schools, churches), research and development district (light industry), and commercial. Development status or actual usage, in contrast, can be characterized by the following percentages of total area: residential property 39%, fields 26%, community facilities 13%, woods and wetlands 10%, commercial areas 7%, and others 5%.

### III. Purpose and Need for Project:

At the present time, sanitary sewer service in the Southeast Amherst planning area is limited to sewer connections for the Wehrle Industrial Park and Erie

Community College. Residents and businesses use a variety of on site wastewater disposal systems. These existing on site systems include conventional septic tanks with absorption fields in either natural soils or select fill, sand filter systems, and septic tanks with effluent discharged to ground water by bored holes. The adequacy of these systems is discussed below.

The Wehrle Industrial Park is presently served by a gravity collection system, a pump station, and a force main that discharges to a gravity sewer on Main Street, as shown on Figure 4. This connection was made as a temporary measure contingent upon completion of area wide planning. The existing routing of wastewater along Transit Road from the industrial park limits the capacity of those existing sewers to handle their design service area. The recommended project will restore capacity to sewers along Transit Road so that their design service area can be realized.

Erie Community College is presently connected to the Village of Williamsville sewer system through a pump station and force main. The Village sewers, which are tributary to the town STP, are undersized to handle existing wastewater quantities and at times overflow into Ellicott Creek. This overflow problem can be reduced by either modifying Village sewers, particularly the Ellicott Creek siphon, or by reducing the quantity of wastewater to be transported. (Independent of this proposed project, the Village of Williamsville is responsible for correcting and is evaluating the overflow problem.) The recommended project will reduce the flow to the Village of Williamsville system and provide reliable conveyance of wastewater from the college to the STP.

Direct discharges of septic tank effluent to the groundwater via bored holes or fractured bedrock are in violation of Erie County Health Department standards. Such discharges are difficult to detect but, none the less, contribute to groundwater pollution. In areas where the groundwater is used for drinking, direct discharges of septic tank effluent are a public health hazard. Within the Southeast Amherst area only one residence was noted as using groundwater for drinking. However, several residents have wells for lawn sprinkling and other uses which result in direct human contact. The recommended project will eliminate subsurface disposal of wastewater and thereby improve the groundwater quality.

Existing subsurface disposal systems in the study area generally do not function properly due to slowly permeable soils, the shallow depth to bedrock, and the seasonally high water table. The suitability of natural soils for absorption fields are depicted on Figure 3. Examination of County Health Department records for the area revealed that about 35% of the systems, for which information was available, had operational problems. Returns from a questionnaire sent to property owners confirmed the wide spread existence of problems with the operation of septic tank soil absorption systems. While there is an obvious bias in property owner surveys, approximately 29% of the returned questionnaires stated that problems had been experienced. After

eliminating duplicate information from the two sources of problem data, it was concluded that about 39% of the on site systems had problems.

The recommended project would remedy the current problems with on site systems by providing gravity sewers to transport area wastewaters for centralized treatment at the existing town STP.

#### IV. Detailed Description of Selected Plan:

The recommended plan for providing reliable and cost-effective disposal of wastewaters in the Southeast Amherst planning area is to construct conventional gravity collectors which will connect to existing sewers in the town and convey wastes to the existing STP for treatment. The layout of the proposed sewer system is shown in Figure 4. Due to the flat terrain and high bedrock elevation in the area, the collectors will be installed at a shallow depth and four pump stations will be required. The predominant wastewater flow from the area will be conducted northward by a new interceptor line, located along Youngs Road, to the existing Peanut Line Interceptor.

With reference to Figure 4, wastewater flows from the side streets are routed to Wehrle Drive, Youngs Road, Main Street and Sheridan Drive generally following the slight natural slopes in each area. The flows are then picked up at the pump stations and directed to the north side of Main Street, west of Brompton Road, where they combine at an interceptor line. This interceptor flows by gravity to Sheridan Drive, then westerly to Young's Road, then north to the Peanut Line Interceptor.

The wastewaters from a small section of the study area will be directed to the existing Village of Williamsville sewers. Along Wehrle Drive, from a point about 732 meters (2400 feet) east of Youngs Road, and along Wilson Road the wastewaters will flow by gravity to the village system.

The recommended system consists of approximately 18,276 meters (59,960 feet) of 20 cm. (8 inch) diameter collector lines, 9,489 meters (31,132 feet) of 25 to 46 cm (10-18 inch) diameter interceptor sewers, 4 pump stations, 2,687 meters (8,815 feet) of force mains, and about 350 manholes.

#### V. Project Costs:

The proposed project is for a complete system to collect and transport wastewaters from the southeast corner of the Town of Amherst to existing treatment facilities. The estimated total construction cost for the project, exclusive of homeowner connection expenses, is \$10,036,000. The total present worth of



the project is \$10,791,000 which includes capital costs, interest during construction, operation and maintenance cost, but excludes property owner connection expenses.

The Southeast Amherst Planning Area will become a part of Amherst Sewer District No. 16 and the local costs for the project will be borne by the entire District. The existing assessment formula for Sewer District No. 16 is to base sewer charges on property owner's frontage, assessed evaluation and water consumption. This formula also uses three rates depending on whether the property is "connected to sewer," has "access to sewer," or "no access to sewer available." Representative costs due to the project and total annual service charges are shown below:

	<u>1982 Sewer Tax</u>	<u>Increase Due To Project</u>	<u>Total Annual Levy</u>
Typical Residence*	\$198.50	\$ 8.91	\$207.41
Typical Vacant Lot**	\$ 2.55	\$ (-.03)	\$ 2.52

\*(\$10,000 assessed evaluation, 75 feet frontage, 90,000 gal/yr water consumption)

\*\*(\$950 assessed evaluation, 75 feet frontage, no access to sewer)

Additionally, within the southeast Amherst service area, property owners will be directly responsible for a portion of the cost to install their individual house connection. These house connections are not eligible for Federal or State aid. The Town of Amherst has approved a plan to share the cost of these house connections. The Town will construct, own, operate and maintain approximately one-half of the length for the required house connections. Based on a typical house connection length of one hundred feet, the property owner would be responsible for fifty linear feet. At an estimated cost of \$21 per foot (due to rock excavation), the typical connection cost would be a one-time charge of \$1,050. Costs to abandon existing septic tanks have not been estimated and would be in addition to the above expenses.

#### VI. Evaluation of Alternatives:

As a part of the facilities planning process for the Southeast Amherst area, numerous alternative methods for meeting wastewater disposal needs were considered. The major types of engineering alternatives considered were on site treatment systems, 3 options for centralized treatment, and 4 types of collection systems. Within each of these major alternatives there were various

suboptions (e.g. 3 types of package treatment plants, 6 routings for gravity sewers) which are generally not considered herein. The conclusions of preliminary screening of alternatives were as follows:

- A. The no action alternative was determined to be unsatisfactory because it would continue pollution of the ground water resource, pose a growing public health hazard to uses of this groundwater, and subject substantial numbers of local property owners to problematic operation of existing disposal systems. Over the short-term, it was believed that Health Department mandated corrections would reduce environmental degradation at a burdensome cost to individuals. Over the long-term, it was assumed that the cost and neighborhood disruption from reconstruction of individual systems would approach that of providing a reliable area wide remedy for wastewater disposal needs at the present time.
- B. Comprehensive upgrading and replacement of on site systems was rejected as an impractical and uneconomical alternative. Based on extensive soils and bedrock investigations, it was determined that standard leach field designs would not work in the natural soils of the area. Septic tank and mound systems would not fit within developed lots in several neighborhoods; their use throughout southeast Amherst was considered not to be cost-effective and likely to aggravate existing drainage problems. Septic tank and sand filter systems were considered to be unfeasible due to poor area drainage. The costs to design and construct the most practical on site treatment system for each individual lot within the planning area was considered not cost-effective and the operation and maintenance of such a composite of various systems was regarded as potentially unmanageable.
- C. After preliminary screening of alternatives, there were four viable methods for wastewater collection (i.e. gravity sewers, small diameter gravity sewers with septic tanks, low pressure sewers, and vacuum sewers) and three treatment methods (i.e. the existing Town STP, a new local STP, and land treatment by overland flow) to be considered. Twelve combinations of these systems were then comparatively developed so that costs along with social and environmental differences among these options could be evaluated. All 12 alternatives were compared on a present worth basis, taking into account all capital construction costs (including land acquisition), interest during construction, engineering design fees, contingencies, legal costs, operation and maintenance, equipment replacement and salvage. Costs for mitigation of adverse environmental effects, where these effects could be anticipated, were included as part of the capital costs of each alternative.

Based on this comparison, treatment of wastewaters at a local STP, regardless of the type of collection system, was the most costly option. The type of treatment system proposed was a bio-disc plant located south of Wilson Road and discharging to Ellicott Creek. The process train consisted of primary sedimentation tanks rotating biological contactors, polishing filters and



chlorine disinfection. Advanced wastewater treatment including phosphorus removal would be necessary for this plant. While a potential long-term benefit of stream flow augmentation might result from this alternative, it was rejected because it cost about 140-150% of the lower cost environmentally sound alternatives.

Likewise, land treatment alternatives cost about 120% of the least cost option and were rejected. Land treatment by slow rate infiltration or rapid infiltration were judged unfeasible due to the low permeability of area soils. Preliminary designs for an overland flow treatment system were developed for the planning area using each of the collection system alternatives. The only feasible location for this type system was east of Erie Community College and north of the industrial park due to the large area required. Public acceptance of this location was considered to be a likely problem. Land application systems located in cold climate zones must store wastewaters during the winter and most of spring. The storage lagoons present a potential odor problem which must be overcome through increased operation and maintenance expenses. Also, because of the present restrictions and health concerns regarding the use of cover crops grown on wastewater irrigated fields, the environmental consequences of land application systems on long term productivity are questionable. This alternative was, therefore, not selected due to costs and perceived public opposition.

The existing Amherst STP was designed and constructed with sufficient capacity to treat wastewaters from the entire town. For this reason, because it is cost-effective and as a result of the preceding decisions on alternatives, the recommended plan is to treat wastewaters from the Southeast Amherst area at the existing plant. Further evaluation of collection system options was undertaken, as follows:

- A. Gravity sewers are the standard method for wastewater collection. They can be used in most soil and climatic conditions. The profile and depth of gravity sewers are controlled by the need to provide a slope sufficient to make them self-cleaning. This slope requirement within the Southeast Amherst area makes gravity sewers a relatively expensive option, since the shallow depth to bedrock necessitates a large quantity of rock excavation during construction. Also, the flat terrain throughout the planning area would require the construction of a number of pump stations for a gravity system. Gravity sewers are normally built within road rights-of-way and thus require little land acquisition or change of land use. They have minimal operation and maintenance costs as long as care is exercised during construction to insure water-tight connections.
- B. The collection system alternative with small diameter gravity sewers and septic tanks provides transport of wastewaters from the exit of individual septic tanks to the STP. Due to the removal of solids by the tanks, smaller diameters and slopes can be used for sewer lines. These factors enable construction of small diameter lines at shallower depths than

conventional gravity systems. Even so, in Southeast Amherst this system would require a considerable amount of rock excavation and the installation of several pump stations. Operation and maintenance costs for small diameter gravity systems are higher than for standard gravity systems because septic tanks require regular cleaning and the incidence of line clogging is greater.

- C. The low pressure sewer alternative involves the use of grinder pumps located at each home or business to transport the wastes. Low pressure lines can be installed just below the frost line, thereby minimizing the required amount of rock excavation for the project area. Disruption of landscaping and vegetation is considerably decreased with this option because smaller and shallower trenching is needed for installation and the routing is more flexible. However, operation and maintenance costs are higher than for standard gravity sewers, since periodic overhaul and replacement of pump units is necessary.
- D. Vacuum sewers utilize a central vacuum station which pulls wastewater through collection lines to each house or business. Vacuum valves and holding tanks are provided for each connected building. When the holding tank is filled, the vacuum valve automatically opens to drain the tank. From the central vacuum station, wastewater is usually pumped to a gravity sewer or treatment plant. Vacuum sewer lines are similar to low pressure mains in their approximate size and installation characteristics. Likewise, the complexity of vacuum sewer systems makes their operation and maintenance requirements greater than that of standard gravity sewers and roughly equal to that of low pressure systems.

Cost estimates for the four types of collection systems, connecting to the existing STP, were within about 10% of each other. Therefore, differences other than economics were re-examined. It was decided that small diameter gravity sewers and vacuum sewers were more likely to have operational problems than either conventional gravity or pressure sewers. Also, because there is limited long-term maintenance experience for the former two of these systems, their estimated maintenance requirements were suspect. Lacking any clear advantages these systems were not recommended.

The grinder pump system appears to offer several environmental advantages over standard gravity sewers for the Southeast Amherst area. The relative advantages of low pressure collector sewers are the following:

- a. Less environmental disruption during construction since the trench for installation is smaller and the routing can be more easily altered to avoid trees.
- b. Lower quantities of extraneous water from inflow and infiltration enter the system requiring treatment.

- c. Less likely to encourage or support new development in present open-spaces because sewer line capacity can be more closely matched to present needs.

For these reasons and assuming equal costs between alternatives, the grinder pump and low pressure collection system was initially recommended over gravity sewers. However, during engineering design of the proposed low pressure system, detailed information accumulated which caused the project alternatives to be reconsidered. More accurate bedrock elevations were provided by 251 soil borings. Surveys showed more detailed topographic features and house elevations needed to establish the slopes of collectors. House to house survey of electrical services revealed the extent of modifications necessary to connect grinder pumps.

The new physical data generally showed a greater depth to consolidate bedrock (previously the depth to fractured rock was used in calculations) and higher house elevations than were relied upon to compute quantities of rock excavation and the slopes of gravity collectors. The extent of electrical work necessary to service grinder pumps was considerably greater than previously estimated. These factors shifted the cost comparison in favor of standard gravity sewers. Based on the more reliable data, it was estimated that pressure sewers would have a present worth value about 8% greater than standard gravity sewers. Due to costs and the greater reliability of standard gravity sewers, they were recommended.

## VII. Environmental Consequences of the Selected Plan:

The probable impact of the proposed project can be evaluated on the basis of its affects on water resources, plant and animal communities, noise and air quality, population and land use, environmentally sensitive areas, and cultural resources.

### A. Relevant Primary and Secondary Impacts of the Proposed Action

#### Water Resources

The extension of gravity collector sewers from the Village of Williamsville and construction of new sewers is likely to have a negligible affect on surface waters of the area. Construction activity will not occur within or adjacent to continuously flowing streams of the area, except for Town drainage ditch 26B which is near the interceptor routing. Intermittent drainage swails may be subject to increased turbidity due to erosion from the sewer line trenching but this affect is considered short-term, not significantly detrimental, and controllable. The use of standard erosion control practices during construction and prompt site restoration, including revegetation, will minimize this affect.

Groundwater quality should be improved by the elimination of septic tank effluent discharges which will result from the project. This is considered a major long-term beneficial affect of the project.

#### Plant and Animal Communities

The alignment of the proposed collector sewers is primarily within the road right-of-way. It is expected that most of the trees and shrubs encountered within the temporary work easements required for sewer line installation can be avoided. If small ornamental trees or shrubs within the work easement cannot be avoided, they will be either replanted or replaced as called for in easement agreements. However, the loss of vegetation on the permanent easements is considered a small but long-term detrimental impact of the project.

Impacts of collector sewer construction upon wildlife in the residential areas will be minor, highly localized, and short-term. Since the road right-of-way is subject to continuing traffic flow, it has a very limited value to wildlife. Disruption of this area for sewer line installation should not significantly affect wildlife.

At the north end of the Youngs Road interceptor sewer alignment, construction will occur within and adjacent to the large and significant Hopkins Road Wetland, as shown in Figure 5. While interceptor routes to avoid the wetland were considered, no economically acceptable alternative could be developed. The permanent easement for the interceptor will result in the loss of approximately 0.5 hectare (1.4 acres) of valuable wildlife habitat. This is a small but significant long-term adverse result of the project. (Further evaluation of this impact is presented under the heading of Wetlands.)

#### Noise and Air Quality

As a result of construction activities, there will be a localized lowering of air quality and increase of noise levels. This will be primarily due to vehicle exhausts and dust from excavation. Dust will be controlled by street sweeping and sprinkling water as necessary. The use of calcium chloride or petroleum products for dust control will be prohibited. Blasting will be required for collector sewer installation. Noise and nuisance conditions during construction will be limited by routine vehicle maintenance and by restricting normal hours of work to the daytime.

The project area is in Erie County, New York, which is located within the Niagara Frontier Air Quality Control Region and the Niagara Frontier Air Quality Maintenance Area. Data from monitoring stations indicate that the

National Ambient Air Quality Standards (NAAQS) are being met with the exception of ozone, total suspended particulates and carbon monoxide. A State Implementation Plan (SIP) has been prepared by NYSDEC which provides measures for attainment and maintenance of the NAAQA. An analysis of the project has shown that the construction and operation of gravity collector sewers will not, by itself, result in the contravention of NAAQS.

#### Population and Land Use

The population projections for the project area are essentially in agreement with the areawide waste treatment management plan (the 208 plan). In evaluating the wastewater flows from the project area, it has been assumed that the current development rate within the area will accelerate. It is expected that the installation of collector sewers in Southeast Amherst will be an inducement to new development. Population growth in the area at about twice the rate of the entire town has been projected. In planning for this new development the Town will install, at its own expense, about 2,030 meters (6,660 feet) of gravity sewers beyond that required to service existing area needs. These non-grant eligible sewers for minor existing wastewater disposal need and new development are located primarily along Wehrle Drive, Wilson Road and Sheridan Drive east of Brampton Road. Also, due to the relatively small flow originating from some portions of the service area and the need to utilize minimum pipe sizes and grades, the proposed gravity sewers will have capacity in excess of that needed for existing development.

Development pressure could adversely affect existing land use patterns, however, by following the existing zoning and building codes the Town of Amherst has the ability to control new development and mitigate potentially adverse consequences.

#### Environmentally Sensitive Areas

Within the Southeast Amherst area there are no floodplains or agricultural districts. While some area soils are classified as prime for agriculture no significant impact on agricultural resources will result from the recommended project because these prime soils are not currently being farmed and there are substantial obstacles to the return of farming. Economic disincentives to farming include present zoning and high land values, the cost of reclaiming these areas to a tillable condition, and the present subdivision of these areas into tracts too small for efficient farming.

#### Wetlands:

As previously noted there are three wetland areas within the Southeast Amherst planning area, as shown in Figures 4 and 5. Two of these wetlands along Wehrle Drive are small, totaling about 6 hectares (15 acres), seasonally wet deciduous wooded wetlands. Construction activity for the



recommended project will not occur within these wetlands. Therefore the project will not directly effect these two wetlands. Indirectly, the project could affect these wetlands by providing capacity for their future development. However, the smaller of these wetlands, about 2.5 hectares (6.2 acres), is located within the flight path of the Buffalo International Airport. Consequently, the Town of Amherst on the recommendation of the U.S. Department of the Interior, Fish and Wildlife Service - Division of Wildlife Assistance, and airport management has agreed to eventually eliminate this wetland to reduce the potential hazard of bird collisions with aircraft. Also, the Town of Amherst has agreed to mitigate potential negative secondary effects of the sewer project on wetlands by prohibiting for 50 years new development located in the Hopkins Road Wetland or the small wetland North of Wehrle Drive, from connecting to the sewers funded in part by Federal Grant. Wetland maps identifying the boundaries of the areas to be subject to tap-in restrictions were prepared, reviewed at a public hearing and submitted as an addendum to the Facility Plan and Environmental Information Document for the project.

As previously stated (refer to Plant and Animal Communities), the interceptor sewer for the Southeast Amherst area will be constructed through the eastern edge of the Hopkins Road Wetland. This construction and the permanent easement for the sewer will result in the loss of approximately one-half hectare (1.4 acres) of wetland. As shown in Figure 5, three alternative routes for the interceptor which would avoid wetland disturbance were examined. The cost of the alternative alignments ranged from about 137% to 213% of the recommended route. The primary constraint in locating the Young Road interceptor was that a connection point had been provided in the Peanut line interceptor sewer at the end of the proposed Youngs Road extension. The size of the Peanut Line Sewer is reduced to the East of the connector stub and capacity is, therefore, not available to the east. Additionally, a water main was constructed following along the East side of the proposed roadway extension. This water main makes routings to avoid the Hopkins Road wetland more difficult.

Because the alternative interceptor routings were significantly more expensive and because the Town of Amherst is committed to extending Youngs Road northward, the recommended sewer route, which is along the west side of the proposed roadway extension, was selected. An Interim Freshwater Wetlands Permit for the recommended interceptor routing has been issued by the New York State Department of Environmental Conservation.



In order to mitigate secondary growth impacts in the wetlands, the following grant conditions will be imposed:

- a. The grantee has submitted to EPA and the State Department of Environmental Conservation an approvable facilities plan amendment including maps that clearly delineate all specific vacant parcels of land within the facilities planning area that are partially or wholly within wetlands as defined by the U.S. Fish and Wildlife Service. These maps must also show which parcels have been developed prior to date of issuance of Finding of No Significant Impact/Environmental Assessment (FNSI/EA).
- b. The grantee agrees that for a period of 50 years from the date of the FNSI/EA no sewer hook-up or other connections to the wastewater treatment facilities included in the facility plan scope of this grant will be allowed or permitted so as to allow the discharge of wastewater from any building, facility or other construction on any parcel of land within any wetlands, which land parcel as of the date of the FNSI/EA was undeveloped (i.e. upon which no building, facility or other construction has been erected or placed) unless approved in writing by the Regional Administrator. This restriction shall not apply to waterfront recreation facilities such as marinas and boating facilities which by their nature must be on waterfront locations.
- c. This condition is intended to benefit any persons or private organization or governmental entity which may have an interest in the avoidance of any future development in the designated areas. Any such beneficiary (who may otherwise have standing to seek enforcement and the right to begin such action in a court to competent jurisdiction) may seek to enforce compliance with this condition in the courts of the State or against the grantees or any non-federal person, organization, or entity subject to this condition if notice of intent to seek such enforcement is first given to the EPA Regional Administrator, the state environmental protection agency, the Grantee, and affected governmental entities and if none of those so noticed initiates corrective action within ninety days of such notice.

### Cultural Resource

In conformance with the procedures Advisory Council on the Historic Preservation (ACHP) the EPA has investigated the project area to identify if any cultural resources would be affected by the construction of the proposed facilities. This cultural resource investigation identified a prehistoric archaeological site, the Allen Site, within the proposed project area. The EPA, with the concurrence of the NYSHPO, has determined that the Allen Site meets the criteria for eligibility to the National Register of Historic Places. EPA, with the concurrence of the NYSHPO, submitted on May 4, 1983 a request to the ACHP for comment on EPA's determination of no adverse effect. The no adverse effect determination requires that a data recovery program be performed prior to construction at the site. ACHP concurred with the recommended no adverse effect determination and the data recovery program on May 13, 1983. EPA will condition the Step 3 construction grant for the scheduling and completion of required data recovery program. The final report of the archaeological excavation and data analysis will be submitted one year after the scheduled data recovery program is completed.

#### B. Steps to Minimize Adverse Effects on the Environment

Prior to starting construction of the proposed facilities, the Town of Amherst will be required to prepare construction plans, specifications, and contract documents. These documents are subject to review and approval by EPA and NYSDEC. They must contain specific measures and proposals to mitigate potential adverse effects as identified in this evaluation. The types of environmental protective measures have been generally outlined in previous sections.

The plans, specifications, and other contract documents to be prepared will include, at a minimum, specific items for controlling noise, dust, odors, erosion, and stream impacts. Additionally, the Town of Amherst must make grantee provisions for assuring maintenance of existing utility services and safe travel routes (access) for emergency vehicles and affected area residents.

Construction operations are proposed to be limited to daylight periods in order to reduce noise nuisances to neighboring residents. Warning signs, barricades, flashers, and other control measures will be employed

to safely redirect traffic around work areas. In-road trenches will be backfilled or covered with steel plate at the close of each work day in order to restore traffic on blocked roads. In addition, emergency services will receive advance notice of road closings and measures, such as maintaining on site steel plate and equipment capable of placing same, taken to assure access by emergency vehicles to dead-end street locations.

In order to avoid accidental utility interruptions, service lines are to be located and the utility given advance notice before excavating in the vicinity of its lines. In instances of scheduled utility interruptions, all affected users will receive advance notice of the time and duration of the interruption. Furthermore, work operations necessary for the return of interrupted service will receive priority over other work and will proceed expeditiously and continuously until completion.

Temporary storage and permanent disposal areas for excess spoil and construction/demolition debris will be located at suitable locations -- not in wetlands, floodplains, lakes, or stream corridors. Construction/demolition debris disposal sites are required to receive New York State approval prior to use.

Protection of roadside trees and ornamental vegetation will be required. Clearing operations will be confined only to those areas where absolutely necessary. Clearing will be limited to that right-of-way where construction will commence within thirty days. Restoration will begin as soon as an area is no longer needed for construction stockpile or access. All areas must be restored to at least as good a condition as existed prior to construction. Sites for equipment, storing of materials, staging areas, parking areas, field offices, and all related construction activities will be prohibited from occurring in wetlands.

#### VIII. Coordination of Environmental Review and Reference Documents Consulted:

##### A. Public Participation Program

A full scale public participation program was conducted as part of the facility planning and coordination efforts of the Town of Amherst. Two public informational meetings were held to review project options being considered. Three formal public hearings were held within the Town to present for review the initially proposed grinder pump and low pressure sewer alternative, wetland maps and the proposed restrictions on connections from future development in wetlands, and the engineering and environmental concerns which determined the subject gravity sewer project. No substantial objections to the current project were raised at the public hearings.

B. Federal, State and Local Agencies Consulted on the Project

Areas of Significant Input by Other Agencies

The applicant and NYSDEC have provided assurance that the requirements of the New York State Environmental Quality Review (SEQR) Act have been satisfied. Specific information is on file in the New York State Department of Environmental Conservation Region 9 Office and in the office of the applicant. This document is the statement of findings by the NYSDEC on the facility plan, its addendums, the joint Environmental Information Document and SEQR draft Environmental Impact Statement, supporting correspondence, and public hearing which constitutes the final SEQR Environmental Impact Statement.

New York State Department of Environmental Conservation	
Division of Water and	Division of Regulatory Affairs
Division of Regulatory Affairs	and Division of Water
600 Delaware Avenue	50 Wolf Road
Buffalo, NY 14202-1073	Albany, NY 12233

List of Other Agencies Consulted

U.S. Environmental Protection Agency  
26 Federal Plaza  
New York, NY 10007

U.S. Department of the Interior  
Fish and Wildlife Service  
One Gateway Center  
Newton Corner, MA 02158

Erie and Niagara Counties Regional Planning Board  
3103 Sheridan Drive  
Amherst, NY 14221

C. Reference Sources

Wastewater Facilities Report for Southeast Amherst and Appendix (Oct. 1981) revisions dated August 1982, March 1983, by URS Company Inc. Buffalo, New York.

Stage II Cultural Resource Investigation Southeast Amherst Planning Area (Feb. 1983) by Charles W. Baier Associates, Boston, New York.

208 Water Quality Management Program (1978-79) by Erie and Niagara Counties Regional Planning Board.

New York State Water Quality Management Plan (Jan 1981) Population Projections by NYSDEC.

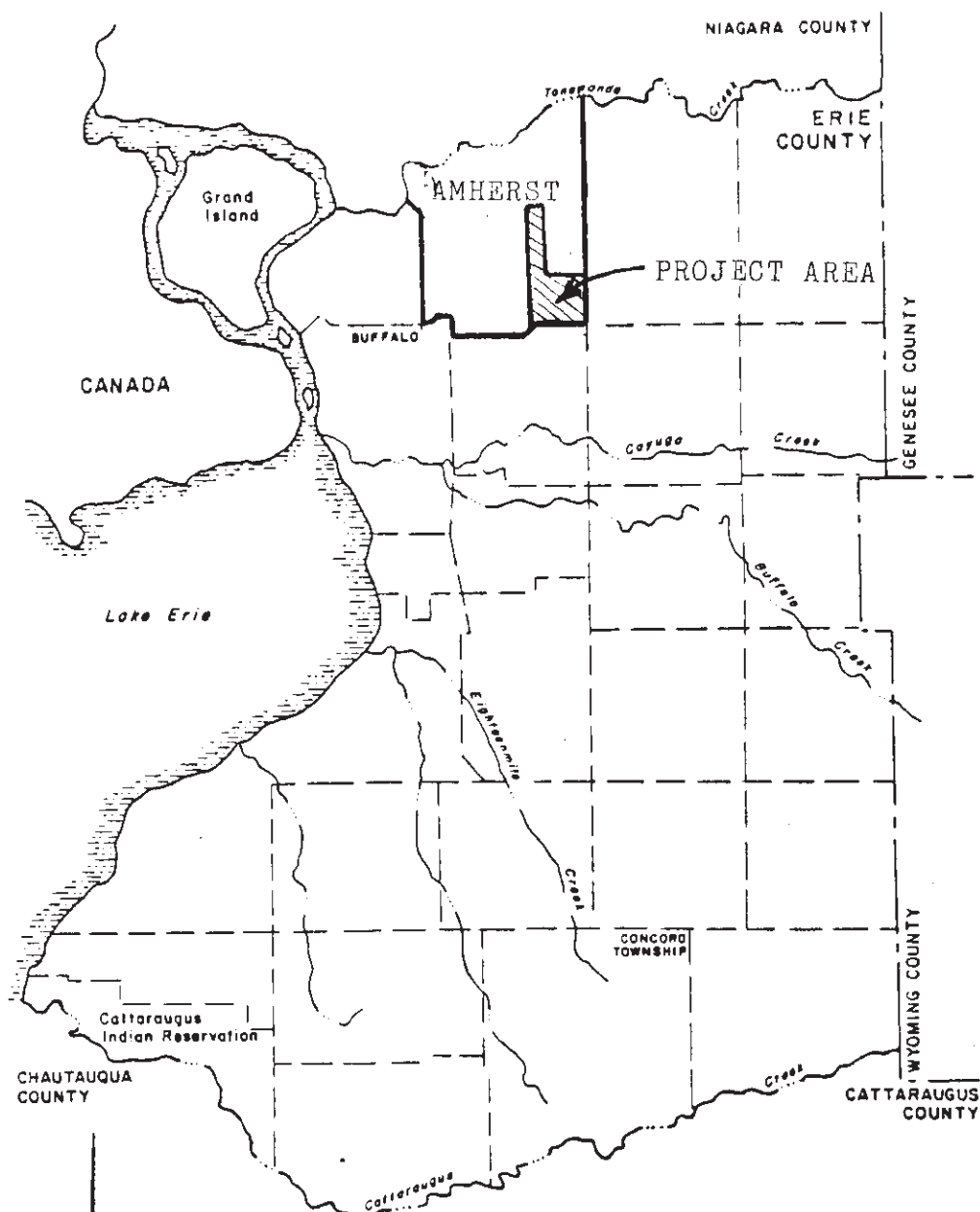
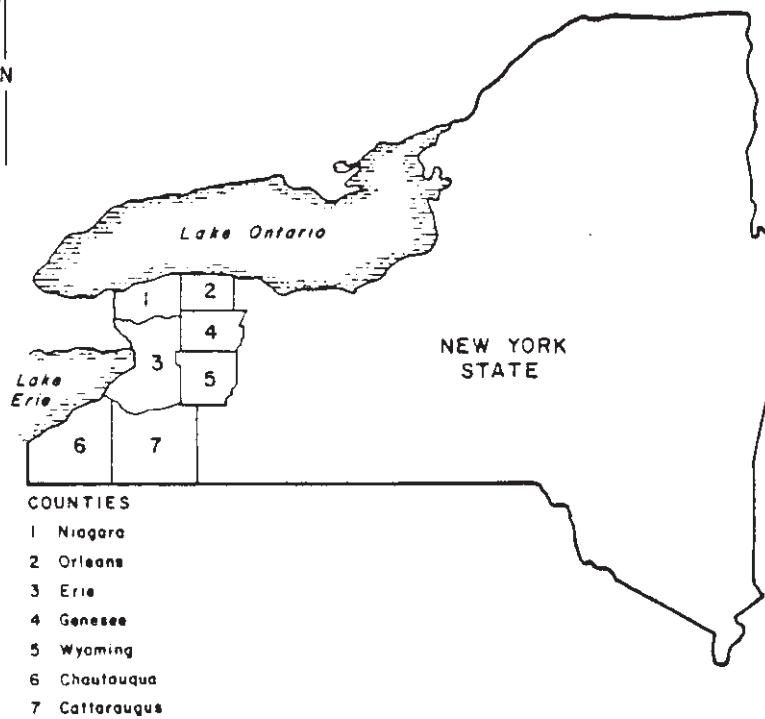
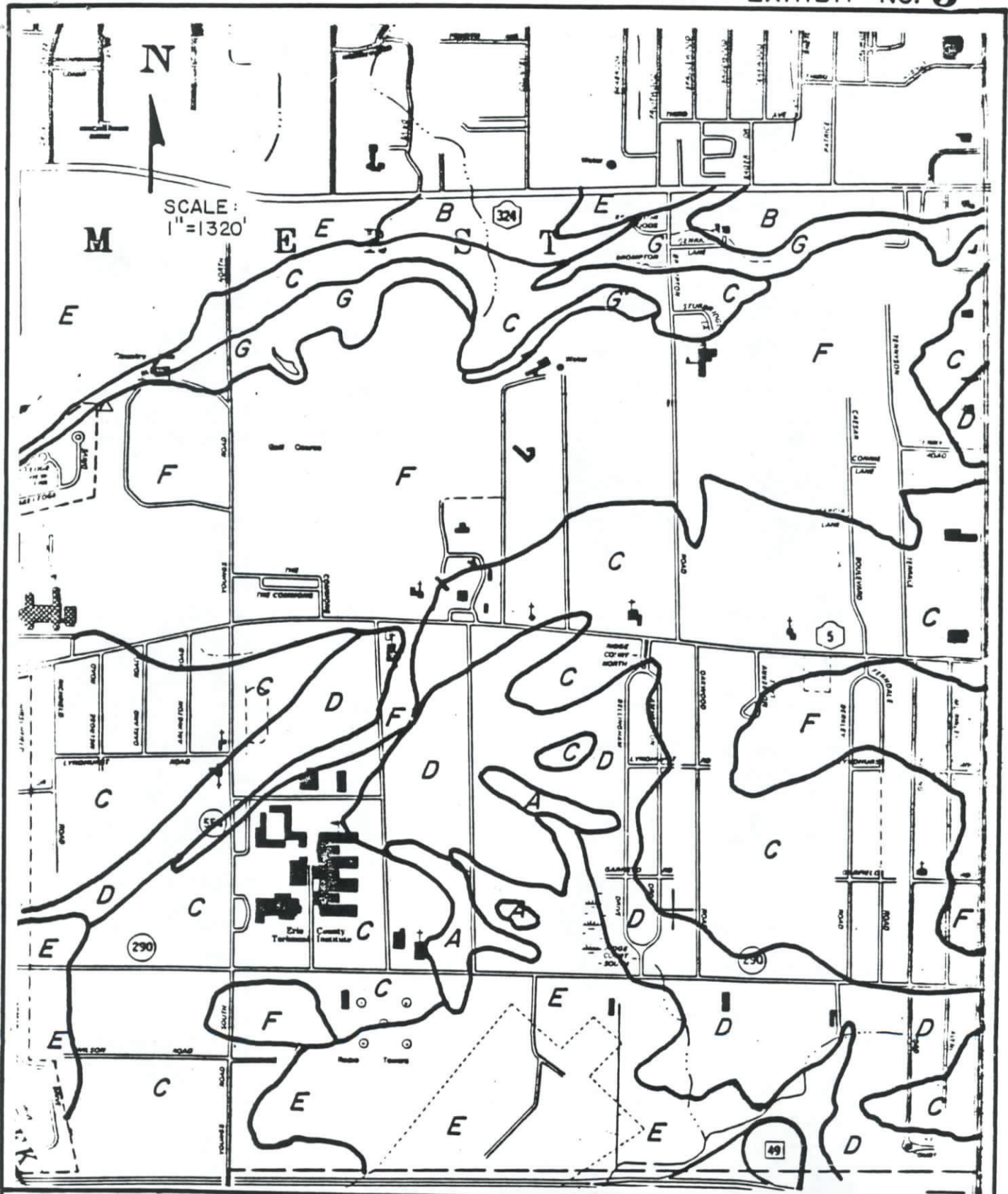


Figure 1  
General Location of Project Areas:  
Western New York







## SOIL SUITABILITY - ABSORPTION FIELD

- (A) MODERATELY SUITED - SOIL PERMEABILITY LIMITATION
- (B) POORLY SUITED - SOIL PERMEABILITY LIMITATION
- (C) POORLY SUITED - MODERATE DEPTH TO BEDROCK LIMITATION
- (D) POORLY SUITED - MODERATE DEPTH TO BEDROCK AND WETNESS LIMITATIONS
- (E) POORLY SUITED - WETNESS AND SOIL PERMEABILITY LIMITATIONS
- (F) POORLY SUITED - SHALLOW DEPTH TO BEDROCK LIMITATION
- (G) POORLY SUITED - SHALLOW DEPTH TO BEDROCK AND SLOPE LIMITATIONS





EVALUATION FOR ON-SITE METHODS OF WASTE DISPOSAL:

Below original ground leachfields - The major soil limitations for the installation of leachfield below the original ground surface are depth to bedrock and potential contamination of the bedrock water table. Several older established neighborhoods in Harris Hill and Akron located on the same soil types constructed a municipal water system decades ago to eliminate this health hazard.

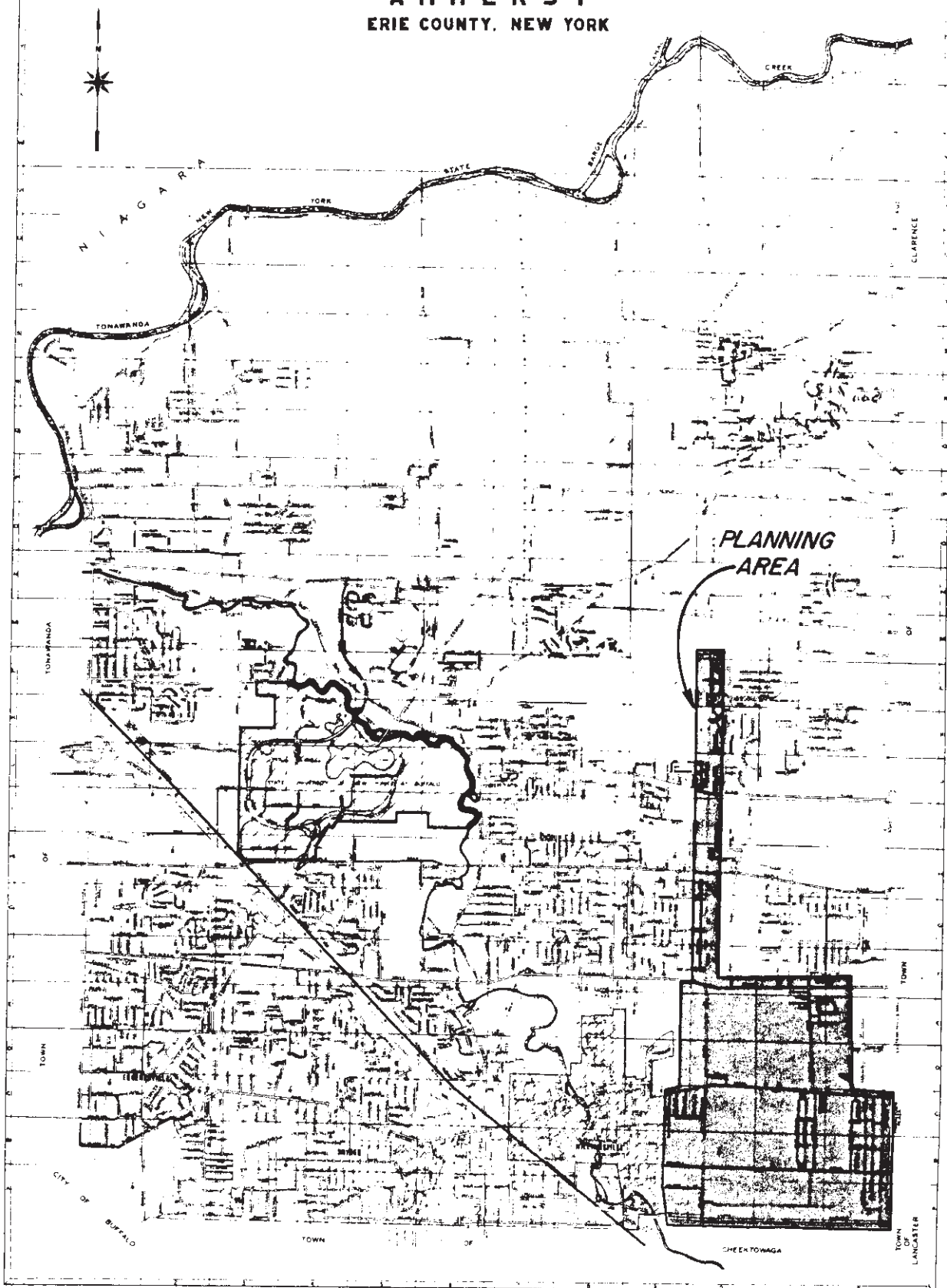
There are no highly suited soil types identified on the soil survey for the installation of in ground leachfields. The further detailed on-site testing conducted for this analysis identified no highly suited soil areas within existing residential areas.

Only two soil types, Cazenovia silt loam and Lima loam delineated in two small areas in the open field east of the Community College are categorized as moderately suited for in-ground leachfields. Special design criteria is necessary to overcome the moderately slow permeability. The Wehrle Drive water installation project crossing the most southerly moderately suited area encountered bedrock with  $3\frac{1}{2}$  foot depths. If this bedrock is consistently within  $3\frac{1}{2}$  foot depths in the moderately suited area, then these areas would be reclassified as poorly suited due to bedrock depth.

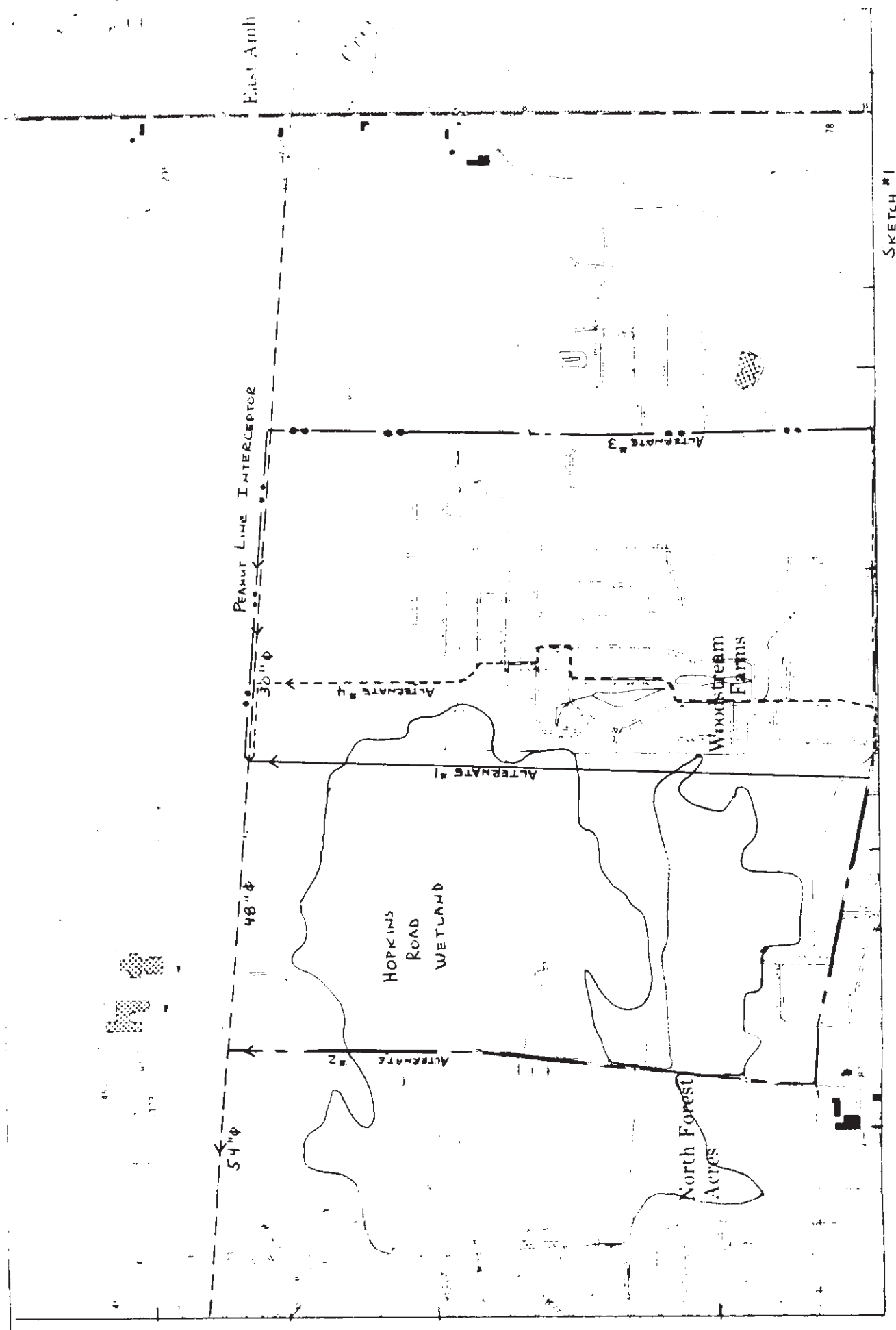
The dominant limiting characteristic to the poorly suited for in-ground leachfields is depth to bedrock. In the deeper soil areas, soil wetness and permeability are both limiting factors. Usually effluent appears at the surface in these deeper soil areas. Though the soil wetness limitation can be eliminated with proper drainage in some locations, the soil permeability

THE TOWN OF  
AMHERST  
ERIE COUNTY, NEW YORK

COUNTY







Alternative Interceptor Routes